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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/316,515	05/21/99	KRIG	D 279.112US <i>WJC</i>

QM32/0830  
SCHWEGMAN LUNDBERG WOESSNER AND KLUTH PA  
P O BOX 2938  
MINNEAPOLIS MN 55402

EXAMINER
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EVANISKO, G

ART UNIT	PAPER NUMBER
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3762 *3*

DATE MAILED: 08/30/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>09/316,515</b>	Applicant(s) <b>Krig et al</b>
	Examiner <b>George Evanisko</b>	Group Art Unit <b>3737</b>

Responsive to communication(s) filed on May 21, 1999

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-91 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) 90 is/are allowed.

Claim(s) 1-3, 8-11, 15-21, 23-28, 35-38, 42-54, 58, 59, 62-65, 67-70, 73-89, and 90 are rejected.

Claim(s) 4-7, 12-14, 22, 29-34, 39-41, 55-57, 60, 61, 66, 71, and 72 is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8-11, 15-21, 26, 27, 35-38, 42-49, 53, 54, 67-70, and 73-87 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 8, 15, 35, 42, 71, and 80, the claims seem to be conflicting with the claims they depend on since the claims they depend on also set forth the equation. It is suggested to just base these claims on the independent claims.

In claims 26, 53, "the minimum first indicated pacing interval" lacks antecedent basis.

In claims 27, 54 "the maximum first indicated pacing interval" lacks antecedent basis.

In claims 67-70, the claims are just a listing of parts and are incomplete since the IIR, FIR, etc. do not perform any function in the claims or for the filter.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1, 23, 24, 26, 28, 50, 51, 53, 58, 62-65, 69, 70, 88, and 91 are rejected under 35 U.S.C. 102(b) as being anticipated by Greenhut et al (5480413). Greenhut meets the limitations in the claims since the claims use the broad terminology of “based at least on...” when computing the pacing interval.

5. Claims 1-3, 26, 27, 58, 59, 63, 88, 89, and 91 are rejected under 35 U.S.C. 102(e) as being anticipated by Hill (5814085). It is noted that the claims use the broad limitation of “based at least on”.

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

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commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 25, 27, 52, 54, 67, 68, and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenhut et al.

Greenhut discloses the claimed invention except for the lower rate limit, the remote programmer, and the filter including an IIR and FIR. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the implantable device of Greenhut to include a lower rate limit on the pacing interval and a programmer since it was known in the art that pacemakers include a lower rate limit to provide a lower limit on the pacing rate that can effectively pace the heart and that pacemakers include programmers to program the implantable device.

In addition, it would have been an obvious matter of design choice to one skilled in the art, to use an IIR or FIR in the filter, since applicant has not disclosed that the IIR or FIR provides any criticality and/or unexpected results and it appears that the invention would perform equally well with the averager/weighted averager as taught by Greenhut to determine if the pacing rate should be changed.

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***Allowable Subject Matter***

8. Claim 90 is allowed.
9. Claims 4-7, 12-14, 22, 29-34, 39-41, 55-57, 60, 66, 71, and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. Claims 8-11, 15-21, 35-38, 42-49, and 73-87 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Evanisko whose telephone number is (703) 308-2612.

GRE

August 25, 2000

George R. Evanisko  
Patent Examiner

8/25/00